List of Questions for Public Meeting Feb. 9 2016

1. **Continuing Emissions/Immediate Action**
   - 1.1. Does Bullseye continue to use chromium?
   - 1.2. If so, does this present the possibility of an ongoing health hazard?
   - 1.3. Is DEQ taking any steps to reduce/mitigate any ongoing hazard?
   - 1.4. Can the public take any steps to reduce/mitigate any ongoing hazard?
   - 1.5. Is there any verification that Bullseye has in fact stopped using Cd and As as they've claimed?
   - 1.6. How confident is DEQ that Bullseye is the source of the observed emissions?
   - 1.7. How confident is DEQ that Bullseye's suspension of the use of Cd and As will prevent further threats to the health of residents?
   - 1.8. Is Bullseye continuing to use any other substances of concern?
   - 1.9. Are there any immediate remediation/exposure prevention actions residents should consider?
   - 1.10. Are selenium emissions something to be concerned about?
   - 1.11. What is the extent of soil contamination already documented?
2. **Health Issues**
   - 2.1. Does the DEQ/OHA recommend residents get tested for metals exposure at this time? Why/why not?
   - 2.2. Will the OHA be setting up a screening program for children in the affected area?
   - 2.3. For people who do want to be tested (for peace of mind, if nothing else), what is the recommended protocol/methodology that will provide the most meaningful information?
   - 2.4. Have Bullseye employees been exposed to these high emissions levels?
   - 2.5. Is there any data that would show whether residents have experienced any adverse health effects that could be tied to these emissions?
   - 2.6. Is there a danger from eating from our gardens/fruit trees/etc.?
   - 2.7. What are the health impacts from exposure to these levels of cadmium, chromium, arsenic, and lead?
   - 2.8. Is there any treatment for heavy metals exposure of the levels we're likely to see in this instance?
   - 2.9. There has been discussion of a cancer cluster near this area - is there basis? Could there be a connection? What is OHA doing regarding this claim?
   - 2.10. Will human health risk assessors and toxicologists be made available to address public concerns regarding this issue? People have lived in close proximity to this source for decades. During summer months residents pull air through their houses to help keep cool.
3. **Testing/Sampling**
   - 3.1. Will the DEQ be doing any soil sampling from the affected area?
   - 3.2. Will the DEQ be doing any sampling of household dust?
   - 3.3. Will the DEQ provide methodology and recommendations for residents who want to do their own sampling?
   - 3.4. Will PPS do any soil or dust sampling in and around the affected schools?
   - 3.5. Why did the DEQ select the substances that it tested for? Is there the possibility Bullseye is emitting other substances of concern that DEQ did not test for?
   - 3.6. Who will pay for testing/sampling?
4. **Compliance Issues**
   - 4.1. Does Bullseye have a current operations permit? Is that permit available?
   - 4.2. How is it possible that Bullseye can be emitting very high levels of toxic materials, yet still be operating legally? Is there a problem with the permitting system?
   - 4.3. Is Bullseye being cooperative with any DEQ/OHA inquiries?
   - 4.4. How/why did Bullseye's filtration system fail?
   - 4.5. Are emission issues with glassmaking "well known"? i.e. is it reasonable to presume Bullseye knew (or should have known) what the emission hazards were?
5. **Legal Issues**
   - 5.1. Bullseye is required to keep certain records (page 5 of their "standard air contaminant discharge permit") which are made available to the DEQ upon request. How can the public get a copy of those records?
6. **DEQ Questions**
   - 6.1. How long has DEQ been aware there was a problem in this neighborhood? Why did it take so long to notify the public?
   - 6.2. What steps will DEQ take to ensure the public has better information about hazardous sources of pollution in the future?

7. **Longer Term**
   - 7.1. Can DEQ use October's sampling results to calibrate Bullseye consumption of Cd and As with emission rates, and then back-calculate emissions in earlier years to get a sense of how severe historical emissions have been?
   - 7.2. Is Bullseye responsible for paying for cleanup/remediation of the neighborhood if that proves necessary?
   - 7.3. Is Bullseye responsible for paying for health impacts that can be linked to their emissions? Will research be done on this front? What does this look like?
   - 7.4. Stormwater Issues -- are there concerns that Cd might be entering the river/ecosystem?
8. **Other Emission Sources**
   - 8.1. Bullseye aside, what is DEQ doing to help address Portland's overall poor air quality? What can Portland residents do to help?
   - 8.2. Beyond Bullseye, what are the other major sources of emissions in Portland?
   - 8.3. Where can we get a list of other businesses that have received emissions permits for toxic materials?
   - 8.4. Does the DEQ have any further information about toxic emissions that have not been shared with the public?
9. **Technical Questions**
   - 9.1. How can we expect indoor air quality to have been affected?
   - 9.2. How was the map released on Friday developed? Does it account for seasonal variations in weather, wind patterns, etc.? Are there plans to release more detailed maps in the future?
   - 9.3. If relevant -- what sorts of chromium compounds are likely to be emitted from the glassmaking process? Where can we get more information on the chemistry of chromium in the glassmaking process?
   - 9.4. Are there emissions from the furnace bricks themselves that present risks above and beyond what is fed into the furnaces?
   - 9.5. What are the differences between air sampling, soil sampling, moss sampling, and how do the results change with each one?
   - 9.6. Will an arsenic exposure map be released?
   - 9.7. If soil contamination is a factor, does this become a CERCLA/superfund issue?
   - 9.8. If residents want to conduct their own air monitoring program, where can we get information on methodology/protocols/labs/etc?
   - 9.9. What was the sampling methodology used tocollect the air samples in Oct – Nov 2015. Can DEQ provide a work plan and quality assurance quality control plan for this monitoring event?
   - 9.10. Where was the exact location of the air monitoring equipment for the Oct - Nov 2015 study? We'd like to see a map identifying the monitoring location.
   - 9.11. What are DEQ's plans for additional air monitoring for the following scenarios:
     a) Near the Bullseye source area
     b) Within the elevated Cd area identified in the Preliminary Cadmium Map released on Friday, February 5, 2016.
   - 9.12. Will DEQ conduct an analysis of Chromium samples for speciation (hexavalent vs. tri-valent)
   - 9.13. What is the time frame for additional sampling?
   - 9.14. Will DEQ continue to monitor Bullseye in the future to ensure public safety?
   - 9.15. Will DEQ expedite future sampling laboratory analysis to provide shorter laboratory turn around times?
   - 9.16. What are DEQ's plans to complete soil sampling for the following scenarios:
     a) Near the Bullseye source area
     b) Within the elevated Cd area identified in the Preliminary Cadmium Map released on Friday, February 5, 2016.
   - 9.17. Will DEQ produce and provide a work plan for future soil sampling?
   - 9.18. Is DEQ going to investigate what other chemicals may be present in the Bullseye process to evaluate the effectiveness of their pollution control systems?
   - 9.19. Bullseye glass does not have a Hazardous Waste Generator ID number. Given the types of materials that are used in the processes at Bullseye I find it hard to believe that at times they do not generate waste materials that would be considered hazardous. How do they dispose of their hazardous waste?
   - 9.20. When will the results of the US Forest Service Moss Study and the associated laboratory data and test locations be made available for analysis with regards to the Bullseye situation? These results may provide a quantitative information and arelational data to better understand the extent of impacts from the Bullseye operations.
10. **Resources**
    - 10.1. Where can we get information about glass making and the chemistry involved so we can have a better understanding of the the general issues?

Inner SE Portland Air Quality (ISEPAQ)

List Of Demands

Immediate/Urgent:

1. Immediate Cessation of All Industry operations that emit ALL dangerous pollutants within city limits (Including Bullseye Glass).
    a. Publish an inventory of ALL chemicals/toxins used by industries within city limits
    b. Independent testing that will breakdown Chromium level exposures (III vs VI)
    c. Identify a SE Portland business/neighborhood Liaison from DEQ or City/State

2. Assistance (resources and monetary) dealing with the health and environmental impacts of exposures. Resources to be vetted by ISEPAQ members.
    a. Reimbursement for independent lab testing (not DEQ backed testers)
    b. Remove sick (medically fragile) people from neighborhoods
    c. Provide course of action for children/adults/pets that test above suggested limits for pollutants

Short Term:

1. Commitment from Bullseye to cease unsafe emissions of toxic pollutants (this includes independent lab testing of air quality).

2. Surveyance (tracking cancer rates, soil/dust/blood test results)
    a. Risk and Exposure assessment by Health Department (what do the PEL and OSHA standards mean in terms of long term exposure and exposure to children)
    b. Provide course of action for children/adults/pets that test above suggested limits for heavy metals.

3. Create compensation fund for any loss of property values or relocation costs incurred as a result of this issue.

Long Term:

1. Rigorous regulatory oversight by public agencies charged with preventing this kind of pollution. Look to California and Washington.
    a. Creation of Green Buffer Zones (no heavy metal pollutant manufacturing within 1 mile of schools)
    b. Monitor Other Portland communities and schools to prevent this happening again.